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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,223	02/19/2004	Jea-Chul Lee	03982- P0008A	5291
24126	7590	06/15/2005	EXAMINER	
ST. ONGE STEWARD JOHNSTON & REENS, LLC			DUNWIDDIE, MEGHAN K	
986 BEDFORD STREET			ART UNIT	
STAMFORD, CT 06905-5619			PAPER NUMBER	

2875

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,223

Applicant(s)

LEE, JEA-CHUL

Examiner

Meghan K. Dunwiddie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the application filed on February 19, 2004 by Lee.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shin et al.** (US 6,033,209) in view of **Yu et al.** (US 2002/0093834).
4. Regarding Claim 1, **Shin et al.** shows a melody candle assembly [Figure 2] using a color change pigment [See column 3 lines 43-50 in reference to Figure 4b: (221)], comprising:
 - A candle [Figure 2: (20)] having a wick [Figure 2: (21)] and an optical fiber [Figure 2: (22)] embedded in the center thereof in parallel with each other, the optical fiber [Figure 2: (22)] being adapted to transmit light from flame produced when

the wick [Figure 2: (21)] is ignited, wherein the optical fiber [Figure 2: (22)] is coated with the color change pigment that stays in black like colors to shield light at normal states and gets changed to transparent colors at a time of the application of heat when the candle is burnt [See column 3 lines 43-50 in reference to Figure 4b: (221)];

- A photo sensor [Figure 2: (31)] disposed at the lower end of the optical fiber [Figure 2: (22)] while being in contact with the lower end of the optical fiber [Figure 2: (22)], for sensing the light transmitted through the optical fiber [Figure 2: (22)];
- And a melody reproducing unit [Figure 2: (30)] mounted at the lower end portion of the candle [Figure 2: (20)] for reproducing the melody or music when the photo sensor [Figure 2: (31)] senses the light from the optical fiber [Figure 2: (22)], the melody reproducing unit [Figure 2: (30)] having an electronic circuit module [Figure 3], and a speaker [Figure 2: (33)] for outputting the melody or music generated to the outside.

Shin et al. does not show:

- The wick being of a substantially thin thread or fabric made of a natural fiber or a chemical fiber
- A battery container into which batteries are mounted

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Yu et al. teaches:

- The wick being of a substantially thin thread or fabric made of a natural fiber or a chemical fiber [See paragraph [0020] lines 10-11]
- A battery container into which batteries [See paragraph [0021] lines 12-14 and Figure 6: (272)] are mounted.

It would have been obvious for one of ordinary skill in the art, at the time of the invention to compose the wick of a thin thread of a natural fiber such as cotton for the purpose and advantage of providing an easily burnable material when the candle is ignited. It would have also been obvious for one of ordinary skill in the art, at the time of the invention to use batteries for the purpose and advantage of providing the electric power needed for the light and sound generating means.

5. Regarding Claim 2, **Shin** et al. shows:

- A metal coated sensor socket [Figure 2 element 31 is resting in it] is mounted around the photo sensor [Figure 2: (31)] including a portion thereof joined with the optical fiber [Figure 2: (22)], for preventing the photo sensor [Figure 2: (31)] from being erroneously operated in response to the outside light coming from the outer peripheral surface of the candle [Figure 2: (20)].

Shin et al. does not show:

- The wick being of a substantially thin thread or fabric made of a natural fiber or a chemical fiber
- A battery container into which batteries are mounted.

Yu et al. teaches:

- The wick being of a substantially thin thread or fabric made of a natural fiber or a chemical fiber [See paragraph [0020] lines 10-11]
- A battery container into which batteries [See paragraph [0021] lines 12-14 and Figure 6: (272)] are mounted.

It would have been obvious for one of ordinary skill in the art, at the time of the invention to compose the wick of a thin thread of a natural fiber such as cotton for the purpose and advantage of providing an easily burnable material when the candle is ignited. It would have also been obvious for one of ordinary skill in the art, at the time of the invention to use batteries for the purpose and advantage of providing the electric power needed for the light and sound generating means.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571)


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272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKD


Stephen Husar
Primary Examiner